```
tcgatacggt cagagaggaa gacggcttag ccaaaagctc tcgcaatgta tacttaacag 720

ctgaggaaag aaaagaagcg cctaagctgt atcgggccct tcaaacaagt gcggaacttg 780

tccaagccgg tgaaagagat cctgaagcgg tgataaaagc tgcaaaagat atcattgaaa 840

cgactagcgg aaccatagac tatgtagagc tttattccta tccggaactc gagcctgtga 900

atgaaattgc tggaaagatg attctcgctg ttgcagttgc tttttcaaaa gcgcgtttaa 960

tagataatat cattattgat attcgtagaa aggaggtgaa ttaatatgta tcgtacgatg 1020

atgagcggca aacttcacag ggcaactgtt acggaagcaa acctgaacta tgtgggaagc 1080

attacaattg atgaagatct cattgatgct gtgggaatgc ttcctaatga aaaagtacaa 1140

attgtgaata ataataatgg agcacgtctt gaaacgtata ttattcctgg taaacgggga 1200

agcggcgtca tatgcttaaa cggtgcagcc gcacgccttg tgcaggaagg agataaggtc 1260

attattattt cctacaaaat gatgtctgat caagaagcgg caagccatga gccgaaagtg 1320

gctgttctga atgatcaaaa caaaattgaa caaatgctgg ggaacgaacc agcccgtaca 1380

attttgtaaa ggatcccccg gggatccctc gaggtcgacc tgcaggggga ccatggtctc 1440

agcgcttgga gccacccgca gttcgaaaaa taataagctt gacctgtgaa gtgaaaaatg 1500

gcgcacattg tgcgacattt tttttgtctg ccgtttaccg ctactgcgtc acggatctcc 1560

acgcgccctg tagcggcgca ttaagcgcgg cgggtgtggt ggttacgcgc agcgtgaccg 1620

ctacacttgc cagcgcccta gcgcccgctc ctttcgcttt cttcccttcc tttctcgcca 1680

cgttcgccgg ctttccccgt caagctctaa atcggggggct ccctttaggg ttccgattta 1740

gtgctttacg gcacctcgac cccaaaaaac ttgattaggg tgatggttca cgtagtgggc 1800

catcgccctg atagacggtt tttcgccctt tgacgttgga gtccacgttc tttaatagtg 1860

gactcttgtt ccaaactgga acaacactca accctatctc ggtctattct tttgatttat 1920

aagggatttt gccgatttcg gcctattggt taaaaaatga gctgatttaa caaaaattta 1980

acgcgaattt taacaaaata ttaacgctta caatttcagg tggcactttt cggggaaatg 2040

tgcgcggaac ccctatttgt ttatttttct aaatacattc aaatatgtat ccgctcatga 2100

gacaataacc ctgataaatg cttcaataat attgaaaaag gaagagtatg agtattcaac 2160

atttccgtgt cgcccttatt ccctttttg cggcattttg ccttcctgtt tttgctcacc 2220

cagaaacgct ggtgaaagta aaagatgctg aagatcagtt gggtgcacga gtgggttaca 2280

tcgaactgga tctcaacagc ggtaagatcc ttgagagttt cgccccgaa gaacgttttc 2340

caatgatgag cactttttaaa gttctgctat gtggcgcggt attatcccgt attgacgccg 2400

ggcaagagca actcggtcgc cgcatacact attctcagaa tgacttggtt gagtactcac 2460

cagtcacaga aaagcatctt acggatggca tgacagtaag agaattatgc agtgctgcca 2520
```

```
taaccatgag tgataacact gcggccaact tacttctgac aacgatcgga ggaccgaagg  2580

agctaaccgc tttttttgcac aacatggggg atcatgtaac tcgccttgat cgttgggaac  2640

cggagctgaa tgaagccata ccaaacgacg agcgtgacac cacgatgcct gtagcaatgg  2700

caacaacgtt gcgcaaacta ttaactggcg aactacttac tctagcttcc cggcaacaat  2760

tgatagactg gatggaggcg gataaagttg caggaccact tctgcgctcg gcccttccgg  2820

ctggctggtt tattgctgat aaatctggag ccggtgagcg tggctctcgc ggtatcattg  2880

cagcactggg gccagatggt aagccctccc gtatcgtagt tatctacacg acggggagtc  2940

aggcaactat ggatgaacga aatagacaga tcgctgagat aggtgcctca ctgattaagc  3000

attggtagga attaatgatg tctcgtttag ataaaagtaa agtgattaac agcgcattag  3060

agctgcttaa tgaggtcgga atcgaaggtt taacaacccg taaactcgcc cagaagctag  3120

gtgtagagca gcctacattg tattggcatg taaaaaataa gcgggctttg ctcgacgcct  3180

tagccattga gatgttagat aggcaccata ctcacttttg ccctttagaa ggggaaagct  3240

ggcaagattt tttacgtaat aacgctaaaa gttttagatg tgctttacta agtcatcgcg  3300

atggagcaaa agtacattta ggtacacggc ctacagaaaa acagtatgaa actctcgaaa  3360

atcaattagc cttttttatgc caacaaggtt tttcactaga gaatgcatta tatgcactca  3420

gcgcagtggg gcattttact ttaggttgcg tattggaaga tcaagagcat caagtcgcta  3480

aagaagaaag ggaaacacct actactgata gtatgccgcc attattacga caagctatcg  3540

aattatttga tcaccaaggt gcagagccag ccttcttatt cggccttgaa ttgatcatat  3600

gcggattaga aaaacaactt aaatgtgaaa gtgggtctta aaagcagcat aaccttttttc  3660

cgtgatggta acttcactag tttaaaagga tctaggtgaa gatcctttttt gataatctca  3720

tgaccaaaat cccttaacgt gagttttcgt tccactgagc gtcagacccc gtagaaaaga  3780

tcaaaggatc ttcttgagat ccttttttttc tgcgcgtaat ctgctgcttg caaacaaaaa  3840

aaccaccgct accagcggtg gtttgtttgc cggatcaaga gctaccaact cttttttccga  3900

aggtaactgg cttcagcaga gcgcagatac caaatactgt ccttctagtg tagccgtagt  3960

taggccacca cttcaagaac tctgtagcac cgcctacata cctcgctctg ctaatcctgt  4020

taccagtggc tgctgccagt ggcgataagt cgtgtcttac cgggttggac tcaagacgat  4080

agttaccgga taaggcgcag cggtcgggct gaacggggg g ttcgtgcaca cagcccagct  4140

tggagcgaac gacctacacc gaactgagat acctacagcg tgagctatga gaaagcgcca  4200

cgcttccga agggagaaag gcggacaggt atccggtaag cggcagggtc ggaacaggag  4260

agcgcacgag ggagcttcca gggggaaacg cctggtatct ttatagtcct gtcgggtttc  4320
```

```
gccacctctg acttgagcgt cgatttttgt gatgctcgtc aggggggcgg agcctatgga 4380

aaaacgccag caacgcggcc ttttacggt tcctggcctt ttgctggcct tttgctcaca 4440

tgacccgaca                                                       4450
```

```
<210> 81
<211> 10212
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant
      pAN251 plasmid

<400> 81
gcggccgcta aaaagagctt gaggatttgc ggagtgaaaa tcagacattg cggaatcagc 60

tagagatgac agaagaggat tacaaggcac tgatcgatat catggatcgg gccagaaaaa 120

tggttgtttc gaaggaagac ggaagaatga aaaaagcggc tcaagaaacg taaagaaacg 180

cctgaaatga accggcccta tagtaagaat aggccggttg ttttgatttc tatgcagact 240

ctcccggtgt catttcgcga tccatatcag gatgccagat gagcgggtct tcccctttgt 300

cccgcgccat atcatactta acagttttaa agttcatttt gttccaaaat tccgctgatt 360

tcattctcgg atttgtccgg atcggcattt tgaatgattt tgcaaattca accaaggctc 420

tcccgtatcc cctgttctgg tagcccggaa gaacctcaag cttccacagc tccaaataat 480

cctggcggtt gtcaaaatag ggattcgatt tgccgttaac ttgatacaga ctcattcgtg 540

ctacaagttt atcgccaaaa taaatcccgt aaaaaggcga ggtgctgtca ttttcaataa 600

tattatcctg aagttcttca agcattgaaa gctcctgaat gccgtattct ttgaatttct 660

tgaattcttc agcgtttta tagttgataa gcagacgttc tacctttgtc aaacaaatct 720

cccccttgt tgtttctaca tatattgtaa acgctttatt taaaaaatcc aaatatttaa 780

actttaattt taagcacatg ggatctttga gaagtaattt cttcttactt ctgctatgat 840

aatacgtaaa tgcgtcgacc gaaacagcag ttataaggca tgaagctgtc cggttttgc 900

aaaagtggct gtgactgtaa aaagaaatcg aaaaagaccg ttttgtgtga aaacggtctt 960

tttgtttcct tttaaccaac tgccataact cgaggcctac ctagcttcca agaaagatat 1020

cctaacagca caagagcgga aagatgtttt gttctacatc cagaacaacc tctgctaaaa 1080

ttcctgaaaa attttgcaaa aagttgttga ctttatctac aaggtgtggt ataataatct 1140

taacaacagc aggacgctct agaggaggag acatcatgaa aattggaatt atcggcggag 1200

gctccgttgg tctttttatgc gcctattatt tgtcacttta tcacgacgtg actgttgtga 1260

cgaggcggca agaacaggct gcggccattc agtctgaagg aatccggctt tataaaggcg 1320
```